Cancer Council

CANCER TYPE
fact sheet

Understanding
Stomach Cancer

A guide for people affected by cancer

This fact sheet has been prepared to help you understand more about stomach cancer. It is common to feel shocked and upset when told you have cancer. We hope this information will help you, your family and friends understand how stomach cancer is diagnosed and treated.

About the stomach

The stomach is a hollow, muscular organ, which is shaped like a pouch. It is part of the digestive system, which helps your body break down food and turn it into energy.

The top of the stomach connects to the end of the oesophagus (food pipe). The bottom of the stomach connects to the start of the small bowel.

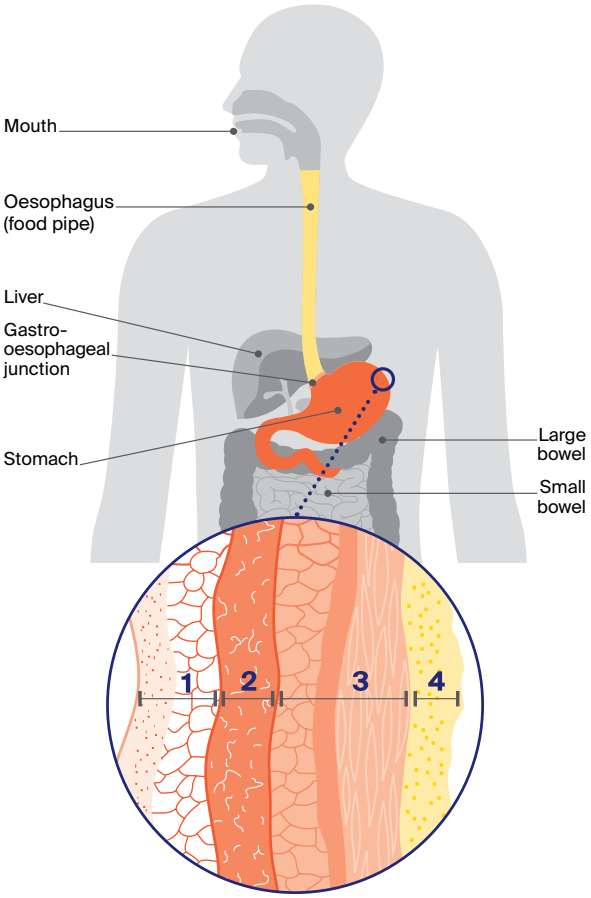
When you eat, food goes into your stomach. The stomach uses its own digestive juices and muscle movements to break the food down into a thick liquid. This liquid moves into the small bowel, where nutrients are absorbed into your blood. The parts of the food your body does not need go into the large bowel and leave the body as waste known as faeces (also called stools or poo).

What is stomach cancer?

Stomach cancer develops when cells in any part of the stomach grow and divide in an abnormal way. Tumours can begin anywhere in the stomach, although most start in the stomach's inner lining (mucosa). This type of cancer is called adenocarcinoma of the stomach or gastric cancer.

Stomach cancer can spread to nearby lymph nodes or to other parts of the body, such as the liver and lungs. It may also spread to the lining of the abdomen (peritoneum).

Anatomy of the stomach



Layers of tissue in the stomach wall

1. **mucosa**
   made up of glandular cells (column-shaped cells), makes fluids called enzymes to help break down food, and mucus to protect the stomach lining
2. **submucosa**
   provides blood and nutrients to the stomach
3. **muscularis externa (muscle layer)**
   produces contractions to help break down food and push it into the small bowel
4. **serosa (outer layer)**
   a smooth membrane that surrounds the stomach

Other types of cancer in the stomach

Other types of cancer can start in the stomach. These include small cell carcinomas, lymphomas, neuroendocrine tumours and gastrointestinal stromal tumours. These types of cancer aren't discussed in this fact sheet and their treatment may be different. Call Cancer Council 13 11 20 for more information.

How common is stomach cancer?

About 2740 people are diagnosed with stomach cancer in Australia each year. Men are almost twice as likely as women to be diagnosed with stomach cancer. It is more common in people over 60, but it can occur at any age.[1]

What are the symptoms?

Stomach cancer may not cause symptoms in the early stages. If there are symptoms, they can include:

- unexplained weight loss or loss of appetite
- difficulty swallowing
- indigestion – pain or burning feeling in the abdomen (heartburn), frequent burping, or stomach acid coming back up into the oesophagus (reflux)
- feeling sick and/or vomiting more often, with no apparent cause
- abdominal (belly) pain
- feeling full after eating, even a small amount
- swelling of the abdomen or feeling bloated
- unexplained tiredness
- vomit that has blood in it
- black or bloody faeces (stools or poo).

Not everyone with these symptoms has stomach cancer. If you have ongoing symptoms, see your general practitioner (GP).

What are the risk factors?

The exact causes of stomach cancer are not known. Below are some risk factors, but most people with these risk factors do not develop stomach cancer:

- being over 60 years
- infection of the stomach with the bacteria Helicobacter pylori (H. pylori)
- smoking tobacco
- low red blood cell levels related to a condition called pernicious anaemia
- a family history of stomach cancer
- having an inherited genetic condition such as familial adenomatous polyposis (FAP), Lynch syndrome, hereditary diffuse gastric cancer (HDGC), or gastric adenocarcinoma and proximal polyposis of the stomach (GAPPS)
- inflammation of the stomach (chronic gastritis)
- being overweight or obese
- drinking alcohol
- eating a diet high in salt-preserved foods (e.g. processed meats, pickled vegetables)
- having part of the stomach removed for a non-cancerous condition.

Diagnosis

If your GP suspects that you have stomach cancer, they will examine you, arrange initial tests and refer you to a specialist such as a gastroenterologist.

Endoscopy and biopsy

The main tests are endoscopy and biopsy. These tests are often done at the same time.

An endoscopy (also called a gastroscopy or upper endoscopy) lets your doctor look inside your stomach and small bowel. It is usually done as day surgery. Before the test, you will probably need to fast (not eat or drink) for about 6 hours.

You will usually have a light sedation to make you sleepy. A general anaesthetic is only needed in a small number of cases. Once the sedative has taken effect, a long, flexible tube with a light and small camera on the end (endoscope) will be passed into your mouth, down your throat and oesophagus, and into your stomach and small bowel.

If the doctor sees anything unusual during the endoscopy, they may take a small sample of tissue. This is called a biopsy. A pathologist will check the sample under a microscope to look for cancer.

The endoscopy takes about 10 minutes. You might feel sleepy after, so someone will need to take you home. You may also have a sore throat or feel bloated for a short time.

Further tests

If a biopsy shows you have stomach cancer, you may have more tests to see if the cancer has spread. This is called staging (see below). Some tests may be repeated during or after treatment to check your health and how well treatment is working.

Test	What it is	Why it's done	What to expect
blood test	A sample of your blood is checked.	Checks your general health, checks for low red blood cell count (anaemia), and sees how your liver and kidneys are working.	Quick test, usually a small needle in your arm.
imaging scan	Pictures of the inside of your body using CT, MRI or PET–CT scans.	Checks if the cancer has spread to other parts of your body.	You'll lie still on a table. For some scans, a liquid dye (contrast) is injected into a vein.
laparoscopy	Keyhole surgery using a thin tube with a camera.	Checks if cancer has spread to the stomach's outer layer or the abdomen lining.	Done under general anaesthetic. The tube is inserted through small cuts in your belly. Afterwards, you may feel bloated or have shoulder pain.
genomic testing	Special tests on tissue removed during surgery.	Finds gene changes (mutations) in cancer cells. This helps decide which treatments may work best.	Uses tissue already taken during surgery or biopsy. No extra procedure is needed.

Sometimes an endoscopic resection is used to help stage stomach cancer, but it can also be a treatment for early-stage stomach cancer (see page 4).

Endoscopic ultrasound (EUS)

You may have an EUS at the same time as a standard endoscopy. The doctor will use an endoscope with an ultrasound probe on the tip or with a built-in ultrasound device. The probe releases soundwaves that echo when they bounce off anything solid, such as an organ or tumour.

This test helps work out whether the cancer has spread into the oesophageal or stomach wall, nearby tissues or lymph nodes. During the EUS, your doctor may use the ultrasound to guide a needle into the area they want to look at and take tissue samples.

Staging

Working out how far the cancer has spread is called staging. It helps your doctors recommend the best treatment for you.

The TNM staging system is used to stage stomach cancer. TNM stands for "tumour, node, metastasis".

T shows how big the tumour is (T1–T4), N shows if lymph nodes have cancer (N0–N3), and M shows if the cancer has spread to other parts of the body. Lower numbers mean the cancer is less advanced.

The TNM scores are combined to work out the overall stage of the cancer, from stage 1 to stage 4. Ask your doctor to explain what the stage of the cancer means for you.

The stages of stomach cancer are:

Stage 1 – early cancer; tumours only in the stomach

Stages 2-3 – locally advanced cancer; tumour has spread deeper into the stomach wall and to nearby lymph nodes

Stage 4 – metastatic or advanced cancer; tumours have spread beyond the stomach wall to nearby parts of the body or lymph nodes, or to more distant lymph nodes and other parts of the body.

Treatment

Your health care team will recommend treatment based on where the cancer is in the stomach, and whether it has spread (the stage). Treatment will also depend on your age, medical history and general health.

To plan and provide care, a multidisciplinary treatment (MDT) team works together. This team may include a gastroenterologist, surgeon, radiation and medical oncologists, specialist nurses, and allied health professionals, such as a dietitian, exercise physiologist or social worker.

Surgery is often part of the treatment for stomach cancer that has not spread. For early-stage cancer, you may only need to have an endoscopic resection (see table right). If the cancer has spread, treatment may include chemotherapy, targeted therapy, immunotherapy or radiation therapy.

Surgery

Surgery aims to remove all of the stomach cancer while keeping as much of the stomach as possible. The surgeon will also remove some healthy tissue around the cancer to reduce the risk of it returning. Different types of surgery can be used depending on where the cancer is in the stomach.

The surgery will be done under a general anaesthetic. There are 3 main ways to perform surgery for stomach cancer:

Open surgery (laparotomy) – The surgeon makes a long cut in the upper part of the abdomen from the breastbone to the bellybutton.

Keyhole surgery (laparoscopy) – The surgeon makes some small cuts in the abdomen, then inserts a thin instrument with a light and camera (laparoscope) into one of the cuts. The surgeon puts tools into the other cuts and performs surgery using the images from the camera for guidance. Also called laparoscopic or minimally invasive surgery.

Robotic surgery – This is a type of keyhole surgery where the surgeon uses robotic tools to remove the cancer through small cuts in the abdomen and/or chest.

"I had surgery for stomach cancer, which is hard because my stomach is so much smaller. I have good days and bad days, but I'm back at work and I exercise every week. My prognosis for the future is good." BRIAN

Types of stomach surgery	
subtotal or partial gastrectomy	Only part of the stomach is removed when the cancer is in the lower part of the stomach. If necessary, nearby fatty tissue (omentum) and lymph nodes are also removed. A small part of the upper stomach attached to the oesophagus is usually left in place.
total gastrectomy	The whole stomach is removed when the cancer is in the upper or middle part of the stomach. Nearby fatty tissue (omentum), lymph nodes and parts of nearby organs, if necessary, are also removed. The surgeon rejoins the oesophagus to the small bowel.
lymph node dissection	Also called lymphadenectomy, lymph nodes are removed from around your stomach to reduce the risk of the cancer coming back and to help in the staging of the cancer (see page 3).
endoscopic resection	If you are diagnosed with very early stomach cancer, you may have an endoscopic resection. This aims to remove the whole tumour during the endoscopy so further treatment is not needed. An endoscopic resection is often done as a day procedure but in some cases, you may stay in hospital overnight.

▸ See our *Understanding Surgery* booklet.

For an overview of what to expect at every stage of stomach cancer care, visit cancer.org.au/cancercareguides/oesophagogastric-cancer. This is a short guide to what is recommended, from diagnosis to treatment and beyond.

What to expect after surgery

This is a general overview of what to expect when having surgery for stomach cancer. The process varies from hospital to hospital, and everyone will respond to surgery differently.

Recovery

- Most people need extra care after surgery. You may spend some time in a high-dependency or intensive care unit before moving to a regular ward. Most people stay in hospital for 3–10 days.
- You will have some pain and discomfort for several days after surgery, but this will be managed with pain medicines.
- The doctor or nurse will talk to you about how to care for any wounds when you go home.
- You will have several tubes in your body after surgery. These may include:
  - a drip in your arm to give you pain medicine and to replace your body's fluids
  - a tube from your bladder (catheter) to collect urine in a bag
  - a feeding tube (see below).
- Talk to your treatment team if you want to organise support at home.

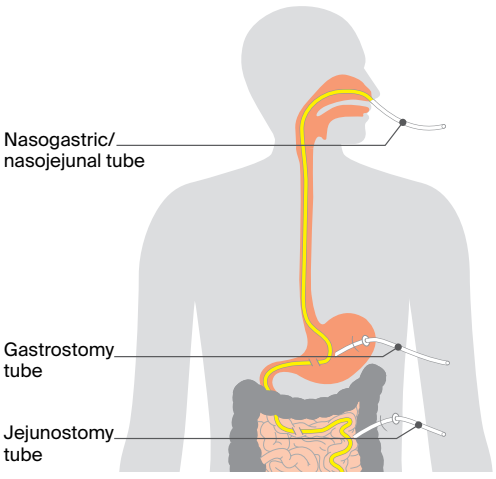
Activity and exercise

- You will usually be asked to start walking the day after surgery. Research shows gentle exercise soon after surgery can reduce side effects, speed up recovery, and improve how you feel.
- Your health care team will provide advice about the right activity levels for you.
- For about 2 weeks after surgery, you'll need to take steps to lower the risk of blood clots in your legs. This may include wearing compression stockings or having daily injections to thin your blood.
- You may need to avoid driving and heavy lifting for 1–2 months after surgery.
- You will be taught breathing or coughing exercises to help keep your lungs clear and reduce the risk of a chest infection.

Eating and drinking

- How you eat and drink will change after surgery.
- When you start eating again, you will begin with clear fluids such as water or broth. Then you'll move to liquids such as milk, soup, ice-cream and yoghurt. After that, you will try pureed foods, then soft foods, and finally solid foods. This can take several weeks or even months.
- Start eating and drinking by mouth when your doctor says it's safe**.** Eating early (called early oral feeding) can help your body heal and lower the chance of problems.
- Try eating 6–8 small meals or snacks a day. This is usually easier than having a few big meals. Ask the hospital dietitian for advice about what to eat.

Having a feeding tube



Some people with stomach cancer may need a feeding tube before, during or after treatment. This helps keep your weight steady and gives your body strength. A feeding tube can go into your stomach or small bowel. It may be put in through your nose (nasogastric or nasojejunal tube) or through your belly with a small operation (gastrostomy or jejunostomy tube).

The tube may stay in place until you can eat and drink normally again. A special liquid food (called formula) goes through the tube to give you the nutrients your body needs. If you go home with the feeding tube, a dietitian will tell you how much formula to take and how often.

Many people find that having a feeding tube is a more comfortable way to get enough food and drink if the cancer is making eating and drinking difficult. Your health care team will show you how to keep the tube clean and working well. The doctor will remove the tube when you no longer need it.

Chemotherapy

Chemotherapy uses drugs to kill or slow the growth of cancer cells. For stomach cancer, it is used:

- **before surgery (neoadjuvant chemotherapy)** – to shrink large tumours and destroy any cancer cells that may have spread
- **after surgery (adjuvant chemotherapy)** – to reduce the chance of the cancer coming back
- **as palliative treatment** – to help control the cancer and improve quality of life (see *Palliative treatment*, page 8).

Chemotherapy drugs are usually given as a liquid through a drip inserted into a vein (intravenous infusion). Sometimes, a small tube is placed in a vein and stays there during treatment. This is called a central venous access device (CVAD).

You will usually have treatment as an outpatient (when you visit hospital for treatment but are not admitted). Sometimes, chemotherapy is given as tablets you can take at home.

Most people have a combination of chemotherapy drugs over several sessions, with rest periods of 2–3 weeks in between. Together, the session and rest period are called a cycle.

Side effects – These may include feeling sick (nausea), vomiting, appetite changes and difficulty swallowing, sore mouth or mouth ulcers, skin and nail changes, numbness in the hands or feet, ringing in the ears or hearing loss, constipation or diarrhoea, and hair loss or thinning. You may also be more likely to catch infections. If you feel unwell or have a temperature of 38°C or higher, get urgent medical attention.

Before chemotherapy begins, your doctor, pharmacist or nurse will talk to you about the side effects to watch out for or report, how to help prevent or manage them, and who to contact after hours if you need help.

▸ See our *Understanding Chemotherapy* booklet.

Targeted therapy

Targeted therapy is a drug treatment that works by blocking specific features of cancer cells. This helps stop the cancer from growing and spreading.

Targeted therapy is sometimes used to treat advanced stomach cancer. This treatment is usually given with chemotherapy every few weeks through a drip into a vein.

Side effects – Ask your doctor what side effects to expect. Possible side effects include fever, nausea, diarrhoea and high blood pressure. Sometimes, targeted therapy can affect the way the heart works. Tell your doctor immediately if you have any side effects.

▸ See our *Understanding Targeted Therapy* fact sheet.

Immunotherapy

Recent advances in treating advanced stomach cancer include immunotherapy drugs called checkpoint inhibitors. These use the body's own immune system to fight cancer.

Side effects – These may include fatigue, skin rash, diarrhoea and cough. Sometimes organs such as the lungs and bowel can become inflamed, which may lead to more serious side effects. Let your treatment team know immediately if you develop any side effects.

▸ See our *Understanding Immunotherapy* fact sheet.

Radiation therapy

Also known as radiotherapy, this treatment uses a controlled dose of radiation, such as focused x-ray beams, to kill or damage cancer cells. Radiation therapy for stomach cancer is commonly used to control bleeding.

Radiation therapy is usually given as a short course (1–14 days). Occasionally, a longer course of radiation therapy (5–6 weeks) will be given, either before or after surgery, or if surgery is not possible.

Each radiation therapy treatment takes about 15 minutes and is not painful. You will lie on a table under a machine that delivers radiation to the affected parts of your body.

Your doctor will let you know your treatment schedule. Possible side effects include fatigue, nausea, vomiting, diarrhoea and loss of appetite.

▸ See our *Understanding Radiation Therapy* booklet.

Managing side effects

Stomach cancer and its treatment can cause side effects. Some of these may be permanent and could change what you can eat, and how your body digests food and absorbs essential nutrients.

Dumping syndrome

As surgery has changed the structure of your stomach, partially digested food can move into the small bowel too quickly. This is called dumping syndrome.

This can especially be a problem with sugary fluids, such as soft drinks, juices and cordial. You may have cramps, nausea, a racing heart, sweating, bloating, diarrhoea or dizziness.

This combination of symptoms most commonly occurs 15-30 minutes after a meal. If they happen 1-2 hours after a meal, they are called late symptoms and can include weakness, light-headedness and sweating. Symptoms are often worse after eating foods high in sugar.

To help manage dumping syndrome, try eating smaller meals, chew your food well, choose high-protein foods (e.g. lean meats, fish, eggs, dairy, beans) and starchy foods (e.g. pasta, rice, potatoes), avoid food and drinks high in sugar, and try not to drink with meals.

Anaemia and osteoporosis

After surgery to remove part or all of your stomach, your body may not absorb certain vitamins and minerals as well as before. When these levels are low, you may develop additional symptoms.

Calcium – Over time, low calcium can cause your bones to become weak and brittle and break more easily (osteoporosis). Your doctor will talk to you about exercise, your diet and drug treatments.

Vitamin B12 – The most common symptom of low B12 is tiredness. Other symptoms include pale skin, breathlessness, headaches, a racing heart and appetite loss. Your doctor may recommend regular B12 injections. If you had a total gastrectomy (see page 4), you will need regular injections as your body will no longer be able to absorb B12.

Iron – Low iron can lead to iron deficiency anaemia, which can cause fatigue, dizziness and shortness of breath. You may need an iron infusion, when iron is given as a liquid through a drip inserted into a vein.

You will probably have regular blood tests to check your vitamin and mineral levels.

Eating during and after treatment

You need to eat and drink enough to get the nutrition your body needs and to avoid dehydration. It is also important to maintain your weight to prevent malnutrition. You may need a feeding tube during or after treatment if you are unable to eat and drink enough to meet your nutritional needs (see page 5).

After treatment, you may find that some foods are uncomfortable to eat and cause digestive problems. You will need to try different foods and change your eating habits, such as eating smaller meals more often throughout the day.

Ask your doctor for a referral to a dietitian with experience in cancer care – they can give you more information. If you are eating less than usual, it is often recommended that you have high-energy and high-protein foods and follow healthy eating guidelines.

▸ See our *Nutrition for People Living with Cancer* booklet.

How to prevent unplanned weight loss

- Have a snack or small meal every 2–3 hours if you have lost your appetite and don't feel hungry enough for a big meal.
- Keep a variety of snacks on hand (e.g. in your bag or car).
- Eat when you feel hungry or crave certain foods.
- Try eating different foods to see if your taste and tolerance for some foods have changed.
- Eat slowly and stop and rest when you are full.
- Try to drink fluids that add energy (kilojoules), such as milk, milkshakes, smoothies or nutritional supplement drinks recommended by your dietitian.
- Prevent dehydration by drinking fluids between meals (30–60 minutes before or after meals).
- Ask your dietitian how you can increase your energy and protein intake.
- Use a food diary to keep a record of how you react to certain foods.

Palliative treatment

Many people think that palliative care is for people at the end of life, but it can help at any stage of advanced stomach cancer. It helps to improve people's quality of life by managing the symptoms of cancer without trying to cure the disease.

The treatment you are offered will be tailored to your individual needs. It may include surgery, radiation therapy, chemotherapy or other medicines. These treatments can help manage symptoms such as pain, bleeding, difficulty swallowing and nausea. They can also slow the spread of the cancer.

- See our *Understanding Palliative Care* and *Living with Advanced Cancer* booklets.

Follow-up appointments

You will have regular appointments to monitor your health, manage any long-term side effects and check that the cancer has not come back or spread.

During these check-ups, you may have blood tests, imaging scans or an endoscopy if needed. You will be able to discuss how you're feeling and any concerns you may have. How often you need to see your doctor will depend on the level of monitoring needed for the type and stage of the cancer you had. You should also see a dietitian for advice about good nutrition.

For some people, stomach cancer does come back. This is known as a recurrence. If this happens, you may have further treatment, including chemotherapy, radiation therapy or surgery.

Where to get help and information

Call Cancer Council 13 11 20 for more information about stomach cancer. Our experienced health professionals can listen to your concerns, put you in touch with services and send you our free booklets. You can also visit your local Cancer Council website.

ACT	**actcancer.org**
NSW	**cancercouncil.com.au**
NT	**cancer.org.au/nt**
QLD	**cancerqld.org.au**
SA	**cancersa.org.au**
TAS	**cancer.org.au/tas**
VIC	**cancervic.org.au**
WA	**cancerwa.asn.au**
Australia	**cancer.org.au**

Other useful websites

You can find many useful resources online, but not all websites are reliable. The websites below are good sources of support and information.

Australian and Aotearoa New Zealand Gastric and Oesophageal Surgery Association	**aanzgosa.org**
Dietitians Australia	**dietitiansaustralia.org.au**
Gastroenterological Society of Australia	**gesa.org.au**
GI Cancer Trials	**gicancer.org.au**
Pancare Foundation	**pancare.org.au**

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Note to reader

Always consult your doctor about matters that affect your health. This fact sheet is intended as a general introduction and is not a substitute for professional medical, legal or financial advice. Information about cancer is constantly being updated and revised by the medical and research communities. While all care is taken to ensure accuracy at the time of publication, Cancer Council Australia and its members exclude all liability for any injury, loss or damage incurred by use of or reliance on the information provided in this fact sheet.

References

1. Australian Institute of Health and Welfare (AIHW), *Cancer Data in Australia 2025*, viewed 20 November 2025, available from aihw.gov.au/reports/cancer/cancer-data-in-Australia.

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Cancer Council acknowledges Traditional Custodians of Country throughout Australia and recognises the continuing connection to lands, waters and communities. We pay our respects to Aboriginal and Torres Strait Islander cultures and to Elders past and present.

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